

## CLAIMS

1. An inhibitor for the formation of a  $\gamma$ -secretase complex comprising a cholesterol synthesis inhibitor or a protein geranylgeranylation regulator as an  
5 active ingredient.
2. The inhibitor for the formation of a  $\gamma$ -secretase complex according to claim 1, wherein the cholesterol synthesis inhibitor or the protein geranylgeranylation regulator is one or more kinds of medical agents selected from a group consisting of an HMG-CoA synthetase inhibitor, an HMG-CoA  
10 reductase inhibitor, a squalene synthetase inhibitor, a squalene epoxidase inhibitor, a lanosterol synthetase inhibitor, an AMPK activator, a farnesyl pyrophosphate synthetase inhibitor and a geranylgeranyl transferase inhibitor.
3. The inhibitor for the formation of a  $\gamma$ -secretase complex according to claim 1, wherein the cholesterol synthesis inhibitor or the protein  
15 geranylgeranylation regulator is an HMG-CoA reductase inhibitor.
4. The inhibitor for the formation of a  $\gamma$ -secretase complex according to claim 1, wherein the cholesterol synthesis inhibitor or the protein geranylgeranylation regulator is pitavastatin.
5. A method of inhibiting the formation of an active complex of  
20  $\gamma$ -secretase using a cholesterol synthesis inhibitor or a protein geranylgeranylation regulator.
6. The method according to claim 5, wherein the method is for inhibiting the formation of an active complex of  $\gamma$ -secretase in lipid rafts.
7. The method of inhibiting the formation of an active complex of  
25  $\gamma$ -secretase according to claim 5, wherein the cholesterol synthesis inhibitor or the protein geranylgeranylation regulator is one or more kinds of medical agents selected from a group consisting of an HMG-CoA synthetase inhibitor, an HMG-CoA reductase inhibitor, a squalene synthetase inhibitor, a squalene

epoxydase inhibitor, a lanosterol synthetase inhibitor, an AMPK activator, a farnesyl pyrophosphate synthetase inhibitor and a geranylgeranyl transferase inhibitor.

8. The method of inhibiting the formation of an active complex of  $\gamma$ -secretase according to claim 5, wherein the cholesterol synthesis inhibitor or the protein geranylgeranylation regulator is an HMG-CoA reductase inhibitor.

9. The method of inhibiting the formation of an active complex of  $\gamma$ -secretase according to claim 5, wherein the cholesterol synthesis inhibitor or the protein geranylgeranylation regulator is pitavastatin.

10. Use of a cholesterol synthesis inhibitor or a protein geranylgeranylation regulator for producing an inhibitor for the formation of a  $\gamma$ -secretase complex.

11. Use according to claim 10, wherein the inhibitor for the formation of a  $\gamma$ -secretase complex is an inhibitor for the formation of an active complex of  $\gamma$ -secretase in lipid rafts.

12. Use according to claim 10, wherein the cholesterol synthesis inhibitor or the protein geranylgeranylation regulator is one or more kinds of medical agents selected from a group consisting of an HMG-CoA synthetase inhibitor, an HMG-CoA reductase inhibitor, a squalene synthetase inhibitor, a squalene epoxydase inhibitor, a lanosterol synthetase inhibitor, an AMPK activator, a farnesyl pyrophosphate synthetase inhibitor and a geranylgeranyl transferase inhibitor.

13. Use according to claim 10, wherein the cholesterol synthesis inhibitor or the protein geranylgeranylation regulator is an HMG-CoA reductase inhibitor.

14. Use according to claim 10, wherein the cholesterol synthesis inhibitor or the protein geranylgeranylation regulator is pitavastatin.

15. A method of screening a substance having an

effect of inhibiting the formation of an active complex of  $\gamma$ -secretase comprising assaying an activity of inhibiting cholesterol synthesis.

16. The method of screening according to claim 15,  
wherein an activity of inhibiting cholesterol synthesis is an activity of  
5 inhibiting synthesis of cholesterol to be accumulated in lipid rafts.

17. The method of screening according to claim 15,  
wherein an activity of inhibiting cholesterol synthesis is an inhibiting activity  
selected from a group consisting of an activity of inhibiting HMG-CoA  
synthetase, an activity of inhibiting HMG-CoA reductase, an activity of  
10 inhibiting squalene synthetase, an activity of inhibiting squalene epoxydase,  
an activity of inhibiting lanosterol synthetase, an activity of inhibiting AMPK  
activator and an activity of inhibiting farnesyl pyrophosphate synthetase.

18. The method of screening according to claim 15,  
wherein an activity of inhibiting cholesterol synthesis is an activity of  
15 inhibiting HMG-CoA reductase.

19. A method of screening a cholesterol synthesis inhibitor, a protein  
geranylgeranylation regulator or an HMG-CoA reductase inhibitor, comprising  
screening an effect of inhibiting the formation of an active complex of  
 $\gamma$ -secretase.

20. A method of screening a cholesterol synthesis inhibitor selected from  
a group consisting of an HMG-CoA synthetase inhibitor, an HMG-CoA  
reductase inhibitor, a squalene synthetase inhibitor, a squalene epoxydase  
inhibitor, a lanosterol synthetase inhibitor, an AMPK activator, a farnesyl  
pyrophosphate synthetase inhibitor and a geranylgeranyl transferase inhibitor,  
25 comprising assaying an effect of inhibiting the formation of an active complex  
of  $\gamma$ -secretase.

21. A method of screening an HMG-CoA reductase inhibitor comprising  
assaying an effect of inhibiting the formation of an active complex of

$\gamma$ -secretase.

22. A method of screening an effect of a test substance on  $\gamma$ -secretase comprising measuring the distribution of constituents required by  $\gamma$ -secretase in the cell for the formation of an active complex thereof by adding the test  
5 substance to cultured cells.

23. The method according to claim 22, wherein the constituents required for the formation of an active complex of  $\gamma$ -secretase are one or more kinds of substances selected from a group consisting of nicastrin, APH-1 and Pen-2.